



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:      WAVEGUIDE LASER

FILED:    24 October 2003

FOR:      MONTY, Nathan P.

**PETITION TO MAKE SPECIAL UNDER MPEP § 708.02(V)**

Mail Stop Conversion  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

Please find below a petition to make special, under the category of Environmental Quality, the attached conversion application of provisional 60/467,542 filed 2 May 2003.

**I. Basis for the Petition**

Pursuant to MPEP § 708.02(V) (8th ed. 2001), Applicants hereby petition for a special status for this application.

**II. Requirements for Granting Special Status**

MPEP § 708.02(V) requires an explanation how the invention contributes to the restoration or maintenance of basic life-sustaining natural elements (i.e., air , water, and soil), for a grant of special status. No fee is required. The following subsections provides an explanation in accordance with the requirements of a grant of special status under MPEP § 708.02(V).

**A. Fee: § 708.02(V)**

This petition requires no fee.

**B. Environmental Quality Explanation: § 708.02(V)**

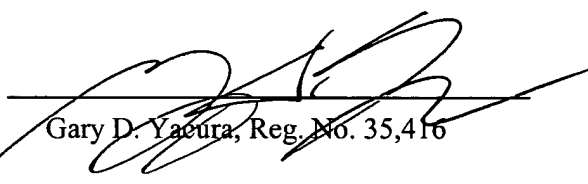
An immediate target market for embodiments of the invention is the industrial printing, etching and marking industry. This industry has historically used ink and paint as its primary means of labeling products. Use and generation of potentially hazardous materials is part of the daily printing operations. Each year over two billion pounds of ink, mostly petroleum-based, are used by this industry. Distinct environmental concerns are associated with specific printing applications, equipment and chemicals utilized by printing operations. All processes share a common trait; they generate some level of hazardous waste. In addition to ink components, the majority of toxic chemicals, mostly petroleum-based, are used in press cleaning and blanket washes. Readily available and affordable, these chemicals remove ink and evaporate quickly for minimal press downtime and greater efficiency and profitability. However, they present serious environmental risks. Petroleum-based cleaners contribute to the creation of smog. In addition, these substances are comprised of a complex blend of hydrocarbons derived from crude oil that contain hazardous attributes, which make them flammable, toxic, corrosive and/or explosive. Researchers estimate that the printing industry releases millions of pounds of toxic compounds into the environment each year.

It is only in the last decade that lasers have been introduced as a clean and green alternative to the existing environmentally hazardous printing operations. The CO<sub>2</sub> laser used for etching and marking apply no hazardous material and require no solvents nor any hazardous waste disposal. Exemplary embodiments of the present invention vastly improve and simplify the existing costly methodology for manufacturing lasers for the

printing industry. Thus having an extremely positive impact on the environment by allowing the printing industry to have a cost effective and environmentally clean alternative for their printing applications.

Very truly yours,

Harness, Dickey & Pierce, P.L.C.

By:   
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GDY/JPK